

**REMARKS**

In the non-final Office Action, the Examiner rejected claims 1-7 and 12-18 under 35 U.S.C. § 103(a) as unpatentable over Bolosky et al. (U.S. Patent No. 5,991,804) in view of Staveley et al. (U.S. Patent No. 6,973,491); rejected claims 8 and 9 under 35 U.S.C. § 103(a) as unpatentable over Bolosky et al. in view of Staveley et al. and Frey et al. (U.S. Patent No. 6,725,392); and rejected claims 10 and 11 under 35 U.S.C. § 103(a) as unpatentable over Bolosky et al. in view of Staveley et al. and Jacobs et al. (U.S. Patent Application Publication No. 2003/0023898).

By this Amendment, Applicants amend claims 1, 13, and 15-18 to improve form, and cancel claims 12 and 14 without prejudice or disclaimer. Applicants respectfully traverse the Examiner's rejections under 35 U.S.C. § 103. Claims 1-11, 13, and 15-18 are pending.

*REJECTION UNDER 35 U.S.C. § 103 BASED ON BOLOSKY ET AL. AND STAVELEY ET AL.*

In paragraph 4 of the Office Action, the Examiner rejected pending claims 1-7, 13, and 15-18 under 35 U.S.C. § 103(a) as allegedly unpatentable over Bolosky et al. and Staveley et al. Applicants respectfully traverse the rejection.

Amended independent claim 1, for example, is directed to a file system that comprises a plurality of servers configured to store data; and a master connected to the servers and configured to communicate with the servers upon startup of the master to identify the data stored by the servers, record, in a non-persistent manner, location information that identifies ones of the servers that store the data, and periodically instruct, after recording the location information, the servers to provide information regarding the data stored by the servers.

Neither Bolosky et al. nor Staveley et al., whether taken alone or in any reasonable

combination, discloses or suggests the features recited in claim 1. For example, Bolosky et al. and Staveley et al. do not disclose or suggest a master that is configured to record, in a non-persistent manner, location information that identifies ones of the servers that store the data. The Examiner alleged that Bolosky et al. discloses a master that is configured to record location information that identifies ones of the servers that store data and cited column 4, line 64 - column 5, line 3, of Bolosky et al. for support (Office Action, page 3). Applicants respectfully submit that nowhere in this section does Bolosky et al. disclose a master that records location information in a non-persistent manner, as required by claim 1.

At column 4, line 64 - column 5, line 3, Bolosky et al. discloses:

The striping pattern generally prescribes that the data blocks are sequentially ordered across the ordered disks, but the sequential blocks need not reside at the same physical block number on adjacent disks. Accordingly, sequential data blocks can reside at entirely different physical block locations within the contiguous disks. Pointers can be used to sequence through the disk array from block to block, or alternatively, a map can be maintained at the controller 22 or in the data servers 24 to track the physical locations of the data blocks.

In this section, Bolosky et al. discloses that a map can be maintained at controller 22 to track the physical locations of the data blocks. Even assuming, for the sake of argument, that the map can be equated to location information, nowhere in this section, or elsewhere, does Bolosky et al. disclose or remotely suggest that the map is recorded in a non-persistent manner, as required by claim 1.

When addressing a similar feature in (now canceled) claim 12, the Examiner alleged that Bolosky et al. discloses in the above-cited section that location information is not stored persistently by the master (Office Action, page 6). The Examiner alleged that "the system provides two alternatives for the location information; the master does not persistently store the

location information in the first alternative" (Office Action, page 6). In the first alternative identified by the Examiner, Bolosky et al. discloses that pointers can be used to sequence through the disk array from block to block (col. 4, line 67 - col. 5, line 1). Applicants respectfully submit that the Examiner is misconstruing the language of claim 1.

Claim 1 recites that the location information is recorded by the master, but just not persistently recorded. In the first alternative identified by the Examiner, Bolosky et al. does not disclose recording location information at all. Only in the second alternative does Bolosky et al. disclose that a map is maintained at the controller (col. 5, lines 1-2). Bolosky et al. does not disclose or suggest, however, that this map is recorded in a non-persistent manner, as required by claim 1.

Bolosky et al. and Staveley et al. also do not disclose or suggest a master that is configured to periodically instruct, after recording the location information, the servers to provide information regarding the data stored by the servers, as further recited in claim 1. When addressing a similar feature in claim 15, the Examiner alleged that Staveley et al. discloses periodically communicating with the servers to obtain changes to the location information and cited column 2, lines 50-58, of Staveley et al. for support (Office Action, page 9). Applicants respectfully submit that Staveley et al. does not disclose or suggest a master that is configured to periodically instruct, after recording the location information, the servers to provide information regarding the data stored by the servers, as required by claim 1.

At column 2, lines 50-58, Staveley et al. discloses:

The present invention, is used to examine configurations of both software and hardware, as well as the system health of all or many of the systems and devices in a network. The system of the present invention probes some or all of the devices connected to the network and generates a system inventory report of each device, describing their

configurations, which may include operating system information, disk information, graphic card information, network information, software application information, or the like.

In this section, Staveley et al. discloses that devices connected to a network are probed to determine their configuration. Nowhere in this section, or elsewhere, does Staveley et al. disclose or suggest a master configured to periodically instruct, after recording the location information, the servers to provide information regarding the data stored by the servers, as required by claim 1.

For at least these reasons, Applicants submit that claim 1 is patentable over Bolosky et al. and Staveley et al., whether taken alone or in any reasonable combination. Claims 2-7 and 12 depend from claim 1 and are, therefore, patentable over Bolosky et al. and Staveley et al. for at least the reasons given with regard to claim 1.

Amended independent claim 13 is directed to a master in a file system that includes the master connected to a plurality of servers. The master comprises means for performing a startup operation; means for communicating with the servers at least one of during or after the startup operation to identify the data stored by the servers; means for storing, in a non-persistent manner, location information that identifies ones of the servers that store the data; and means for updating the location information by periodically instructing the servers to identify the data stored by the servers.

Neither Bolosky et al. nor Staveley et al., whether taken alone or in any reasonable combination, discloses or suggests the combination of features recited in claim 13. For example, Bolosky et al. and Staveley et al. do not disclose or suggest a master that comprises means for storing, in a non-persistent manner, location information that identifies ones of the servers that

store the data, for at least reasons similar to reasons given with regard to claim 1.

Bolosky et al. and Staveley et al. also do not disclose or suggest means for updating the location information by periodically instructing the servers to identify the data stored by the servers, as further recited in claim 13, for at least reasons similar to reasons given with regard to claim 1.

For at least these reasons, Applicants respectfully submit that claim 13 is patentable over Bolosky et al. and Staveley et al., whether taken alone or in any reasonable combination.

Amended independent claim 15 is directed to a file system that comprises a plurality of servers configured to store files as chunks and a master connected to the servers. The master is configured to determine location information by communicating with the servers, the location information being based on which of the servers store ones of the chunks, store the location information in a non-persistent manner, and update the location information by periodically communicating with the servers to obtain changes to the location information.

Neither Bolosky et al. nor Staveley et al., whether taken alone or in any reasonable combination, discloses or suggests the combination of features recited in claim 15. For example, Bolosky et al. and Staveley et al. do not disclose or suggest a master that is configured to store location information in a non-persistent manner, for at least reasons similar to reasons given with regard to claim 1.

Bolosky et al. and Staveley et al. also do not disclose or suggest a master that is configured to update the location information by periodically communicating with the servers to obtain changes to the location information, as further recited in claim 15. The Examiner alleged that Staveley et al. discloses this feature and cited column 2, lines 50-58, of Staveley et al. for

support (Office Action, page 9). Applicants respectfully disagree.

Column 2, lines 50-58, of Staveley et al. is reproduced above. In this section, Staveley et al. discloses that devices connected to a network are probed to determine their configuration. Nowhere in this section, or elsewhere, does Staveley et al. disclose or suggest a master that is configured to update location information by periodically communicating with the servers to obtain changes to the location information, as required by claim 15.

For at least these reasons, Applicants submit that claim 15 is patentable over Bolosky et al. and Staveley et al., whether taken alone or in any reasonable combination.

Amended independent claims 16-18 recite features similar to, but possibly different in scope from, features recited in claim 15. Claims 16-18 are, therefore, patentable over Bolosky et al. and Staveley et al., whether taken alone or in any reasonable combination, for at least reasons similar to reasons given with regard to claim 15.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1-7, 13, and 15-18 under 35 U.S.C. § 103 based on Bolosky et al. and Staveley et al.

*REJECTION UNDER 35 U.S.C. § 103 BASED ON  
BOLOSKY ET AL., STAVELEY ET AL., AND FREY ET AL.*

In paragraph 5 of the Office Action, the Examiner rejected claims 8 and 9 under 35 U.S.C. § 103(a) as allegedly unpatentable over Bolosky et al. in view of Staveley et al. and Frey et al. Applicants respectfully traverse the rejection.

Claims 8 and 9 ultimately depend from claim 1. Without acquiescing in the Examiner's rejection with regard to claims 8 and 9, Applicants respectfully submit that the disclosure of Frey

et al. does not cure the deficiencies in the disclosures of Bolosky et al. and Staveley et al. identified above with regard to claim 1. Therefore, claims 8 and 9 are patentable over Bolosky et al., Staveley et al., and Frey et al., whether taken alone or in any reasonable combination, for at least the reasons given with regard to claim 1.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 8 and 9 under 35 U.S.C. § 103 based on Bolosky et al., Staveley et al., and Frey et al.

*REJECTION UNDER 35 U.S.C. § 103 BASED ON  
BOLOSKY ET AL., STAVELEY ET AL., AND JACOBS ET AL.*

In paragraph 6 of the Office Action, the Examiner rejected claims 10 and 11 under 35 U.S.C. § 103(a) as allegedly unpatentable over Bolosky et al. in view of Staveley et al. and Jacobs et al. Applicants respectfully traverse the rejection.

Claims 10 and 11 ultimately depend from claim 1. Without acquiescing in the Examiner's rejection with regard to claims 10 and 11, Applicants respectfully submit that the disclosure of Jacobs et al. does not cure the deficiencies in the disclosures of Bolosky et al. and Staveley et al. identified above with regard to claim 1. Therefore, claims 10 and 11 are patentable over Bolosky et al., Staveley et al., and Jacobs et al. for at least the reasons given with regard to claim 1.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 10 and 11 under 35 U.S.C. § 103 based on Bolosky et al., Staveley et al., and Jacobs et al.

*CONCLUSION*

In view of the foregoing amendments and remarks, Applicants respectfully request the Examiner's reconsideration of the application and the timely allowance of pending claims 1-11, 13, and 15-18.

As Applicants' remarks with respect to the Examiner's rejections are sufficient to overcome these rejections, Applicants' silence as to certain assertions by the Examiner in the Office Action or certain requirements that may be applicable to such rejections (e.g., whether a reference constitutes prior art, motivation to combine references, etc.) is not a concession by Applicants that such assertions are accurate or such requirements have been met, and Applicants reserve the right to analyze and dispute these assertions/requirements in the future.

If the Examiner does not believe that all pending claims are now in condition for allowance, the Examiner is urged to contact the undersigned to expedite prosecution of this application.



To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1070 and please credit any excess fees to such deposit account.

Respectfully submitted,

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